

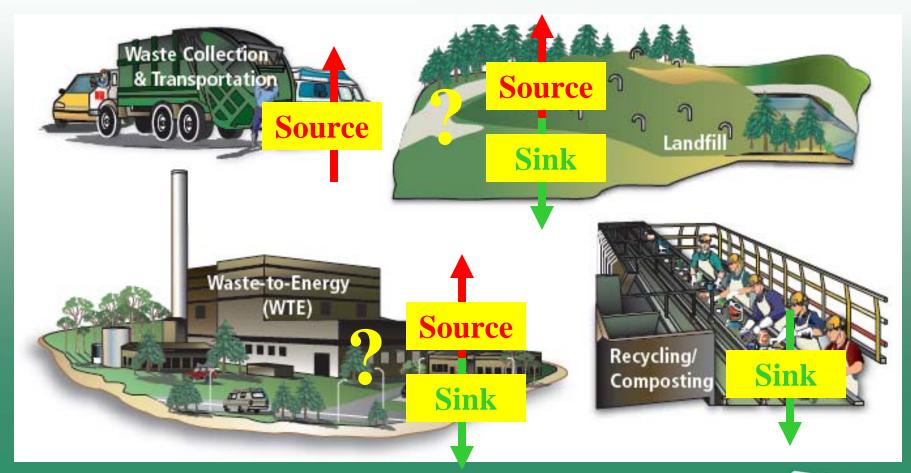


# Climate Change and Waste Management

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#### Solid Waste Management GHG Sources and Sinks







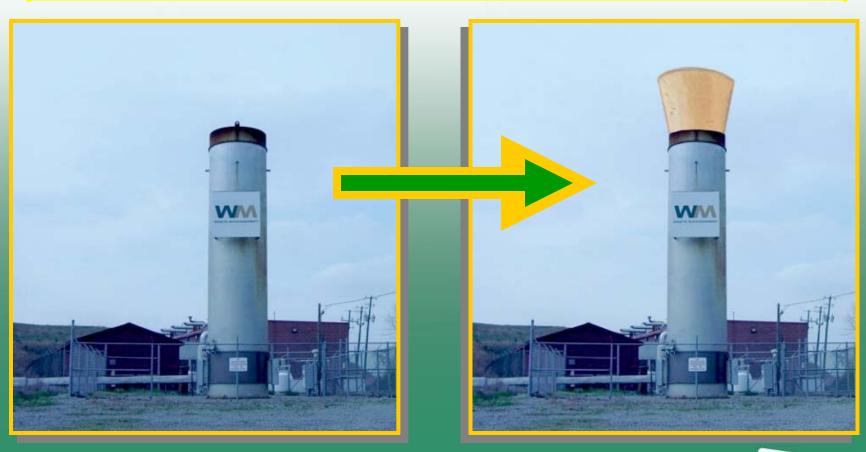
### WM's Contributions to GHG Reduction



- Collection and Destruction of LF Methane
- Emission Oxidation in LF cover materials
- LFGTE and WTE Plants to displace fossil fuels
- Development of LFG to LNG Technology
- Development of Bioreactor Landfill Technology
- Development of Conversion Technology Partnerships
- Advanced Vehicle Technology for Alt fuels/Hybrids
- Increased Recyclable Material Recovery
- Upstream Services Waste Reduction Services
- Carbon Sequestration and LF Forestry



#### WM Immediate Goal: Cork Our Flares!!







## Positive GHG Messages from Waste Industry



- Waste-Related Emissions are small, < 1-3%</li>
- Progress to date has been Significant
  - 50 80% reduction in GHG emissions
  - Increased recycling rates
  - Landfill Gas Controls (>>>75% capture!!!!)
  - Increased conversion to energy
  - Alternative fueled vehicles
- Landfill Sequestration
- Opportunities for further Waste-to-Energy



#### Waste Management/Recycle America – 2005 Recycling Benefits

**107 Million Mature Trees** 





2.9 Billion Gallons of Oil

Avoided 5.0 Million

Metric Tons

(MTCE) of GHG

Emissions

28.6 Billion Kw-Hrs of Electricity



In 2005, we recycled 6.3 million tons of cardboard and paper; 967,000 tons of glass; 314,000 tons of plastics; 71,000 tons of steel cans;

26.5 Million Cubic Yards Of Landfill Airspace

71,000 tons of steel cans; and 28,000 tons of aluminum.



151 Million Gallons of Gasoline

44 Billion Gallons of Water



#### Overall GHG Reductions for Solid Waste Management – All Sources

